



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/974,934	10/11/2001	Steven Thompson	PD-200306	1129
7590	11/03/2004		EXAMINER	
Hughes Electronics Corporation Patent Docket Administration Bldg. 1, Mail Stop A109 P.O. Box 956 El Segundo, CA 90245-0956			GESESSE, TILAHUN	
			ART UNIT	PAPER NUMBER
			2684	

DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/974,934	THOMPSON ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Tilahun B Gesesse	2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 11 October 2001.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-15 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                     | Paper No(s)/Mail Date. _____ .  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____ .                                  |

## DETAILED ACTION

### ***Specification***

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Kapoor (US 5,751,969).

Claim 1, Kapoor discloses a system for managing data congestion in a communications network (figure 1, ground station (30,31 and 40) and satellites 20 &21) which establishes communication cells at respective locations on the surface of the earth to enable communication between a plurality of user terminals (30 and 31) and at least one network controller (40) of figure 1 and column 1, line 50-column 3, line 29), comprising:

Kapoor discloses a congestion determiner (figure 2), adapted to determine that data congestion exists in said network which interferes with an ability of at least one user terminal to communicate in said network (column 3, lines 30-column 4, line 11 and figure 2) and

Kapoor discloses a congestion controller (26), adapted to control at least one of down linking of data from said network (10) controller to at least one select group of said user terminals (30 or 31) and up linking of data from said at least one select group of said user terminals to said network controller (column 3, lines 30-56 and figure 1), in response to said determined data congestion (column 4, lines 11-67 and figure 3).

Claim 2, Kapoor discloses the communications network (10) includes a satellite communications network (30 and 31) and the user terminals include satellite terminals (30-31 and 40), and the congestion controller (26) controls the at least one of the down-linking and up linking of the data to and from at least one select group of said satellite terminals (column 30-56 and figures 1 and 2).

Claims 3-5, Kapoor discloses congestion controller (26) controls the at least one of the downlinking and Up-linking of the data to and from the at least one select group of user terminals which are all located within a single uplink cell (the group of select user terminals within a signal uplink such as users 30 or 31 of figure 1).

Claim 6, Kapoor discloses a method for managing congestion in a communications network (figure 1 and abstract) , which establishes communication cells (at beam spot 30, 31 and 40) at respective locations on the surface of the earth to enable communication between a plurality of user terminals and at least one network controller (figure 1), comprising:

Kapoor disclose determining the existence of data congestion in said network which interferes with an ability of at least one user terminal to communicate in said network (abstract and figure 1), and

Kapoor discloses controlling at least one of down-linking of data from the network controller (26) to at least one select group of the user terminals (30-31 and 40) and up-linking of data from at least one select group of said user terminals to the network controller , in response to said data congestion (column 4 line 22-column 6, lines 17 and figures 4 and 5).

Claim 7, Kapoor discloses the communications network includes a satellite communications network (figure 1) and the user terminals include satellite terminals (30-31 and 40, column 2, line 5 through column 3, lines 29 and figure 1) and the congestion controlling controls said at least one of said down-linking and up-linking of said data to and from at least one select group of said satellite terminals (column 3, line 30-column 4, line 11 and figure 1).

Claim 8, Kapoor discloses the congestion controlling controls said at least one of said down-linking and up-linking of said data to and from said at least one select group of user terminals which are all located within a single cell (column 4, line 12 through column 5 line 19).

Claims 9-10, Kapoor discloses congestion controlling controls the at least one of the downlinking and up linking of the data to and from the at least one select group of user terminals which are located within multiple cells (it is considered that group of user terminals (30) and group of user terminals (31) are multiple cells and figure 1).

Claim 11, Kapoor discloses a computer-readable medium of instructions (column 3, line 58-column 4, line 11 and figure 2), adapted to control a communications network to manage congestion in a communications network which establishes communication

cells at respective locations on the surface of the earth to enable communication between a plurality of user terminals and at least one network controller (column 3, line 30-column 4, line 11), comprising: a first set of instruction, adapted to control the communications network to determine that data congestion exists in said network which interferes with an ability of at least one user terminal to communicate in the network (column 3, line 58-column 4, line 11) and a second set of instruction, adapted to control at least one of downlinking of data from said network controller to at least one select group of said user terminals and up-linking of data from at least one select group of said user terminals to said network controller, in response to said determined data congestion (column 4, lines 12-column 5, line 19 and figure 3).

Claim 12, Kapoor discloses the communications network includes a satellite communications network and said user terminals include satellite terminals; and said second set of instructions controls said at least one of said down-linking of said data to and from at least one select group of said satellite and up-linking terminals (column 2 line 5-column 3 line 11 and figure 1).

Claims 13-14, Kapoor discloses the second set of instructions controls the controls the at least one of said down-linking and up-linking of said data to and from said at least one select group of user terminals which are all located within a single cell and multiple cells (column 3, line 58-column 4, lines 11 and figure 2).

Claim 15, Kapoor discloses the second set of instructions controls the at least one of said down-linking and up-linking of the data to and from the at least one select

group of user terminals which are located in all uplinks cells of the network (column 3,line 58-column 4, lines 11 and figure 2).

### **Conclusion**

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Gao et al (6,738,350) discloses an approach for performing avoidance in a switching communication system (abstract).

Hassan et al (5,946,625) discloses a fractional loading scheme is used to improve the spectral efficiency of a cellular system , abstract.

Voce et al (2002/0080799) disclose payload congestion control information by the central control station (abstract and figure 2).

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tilahun B Gesesse whose telephone number is 703-308-5873. The examiner can normally be reached on flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 703-308-7745. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2684

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Tilahun Gesesse*  
Primary Examiner  
US Patent and Trademark Office  
Tel. 703-308-5873

October 12, 2004



**TILAHUN GESESSÉ**  
**PATENT EXAMINER**